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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Brian Ellis

608-454

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23117 7590 12/05/2008  
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EXAMINER

OH, TAYLOR V

ART UNIT

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1625

MAIL DATE

DELIVERY MODE

12/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

It is noted that applicants have filed an Amendment after the Final Rejection on 11/07/08; applicants' attorney has addressed the issues of record. The proposed amendment will be entered ; however, it is not in a condition for allowance.

**The Status of Claims**

Claims 1-9 are pending.

Claims 1-9 are rejected.

Claims 10-11 are cancelled.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The rejection of Claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Ellis et al (EP 1043064) has been maintained with the reason of record filed on 8/18/08 .

**Applicants' Argument**

Applicants argue the following issues:

a. There is no suggestion in the prior art that the vanadium is in a gram atom ratio of between 0.4 and 0.865 and the niobium is in a gram atom ratio of between 0.135 and 0.23 and their sum of the respective gram atom ratios of vanadium and niobium is between 0.55 to 1.

b. The present invention is concerned with improving selectivity to acid to the detriment of ethylene, but Ellis does not intend to improve selectivity to acid over ethylene or vice-versa, but rather only to improve the selectivity of both acid and ethylene at the expense of carbon dioxides.

Applicants' arguments have been noted, but the arguments are not persuasive.

First, regarding the first argument, the Examiner has noted applicants' arguments.

However, the prior art does disclose generic teachings of  $0 < d \leq 2$ ;  $0 < e \leq 1$  and the range of the "d" for the vanadium to be  $d > 0.1$ , and the range of the "e" for the niobium to be  $e > 0.01$  (see page 3, paragraph); furthermore, the examples of suitable catalysts have the following formula: the e value for niobium can be 0.139 as shown in

$\text{Mo}_{1.00}\text{V}_{0.232}\text{Nb}_{0.139}\text{Au}_{0.007}\text{O}_y$ , whereas the d value for vanadium can be 0.426 as shown in

$\text{Mo}_{1.000}\text{V}_{0.426}\text{Nb}_{0.115}\text{Au}_{0.0008}\text{O}_y$  (see page 3, paragraph #0013). Moreover, from this

information, it may imply that the sum of  $d + e$  could be 0.565, which is well within the boundary of the claimed sum of the respective gram atom ratios of vanadium and niobium between 0.55 to 1. In addition, it is well-established that merely selecting ranges is not patentable absent a showing of criticality. In re Becket, 33 USPQ 33 (CCPA 1937). In re Russell, 439 F.2d 1228, 169 USPQ 426 (CCPA 1971).

Each value of them in the prior art overlaps with each of those claimed values. The selection of each specific ratio of the d and e values in the catalyst composition are well understood by those of ordinary skill in the art to be result-effective variables, especially when attempting to control selectivity of the oxidation process. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to select the suitable range of each value of “d” and “e” in the prior art’s catalyst composition by routine experimentations to arrive at the claimed invention. Therefore, applicants’ argument is not persuasive.

Second, regarding the second argument, the Examiner has noted applicants’ arguments. However, the claim is directed to a catalyst composition for the oxidation of ethane and/or ethylene to acetic acid. This description does not mention anything about improving selectivity to acid to the detriment of ethylene unlike applicants’ argument. Furthermore, regardless of how Ellis improves the selectivity of both acid and ethylene at the expense of carbon dioxides, the main teaching of the Ellis expressly relates to a catalyst for the oxidation of ethane to ethylene and/or acetic acid and/or for the oxidation of ethylene to acetic acid. This particular aspect is directly related to the claimed invention. Therefore, applicants’ argument is not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Taylor Victor Oh, MSD,LAC  
Primary Examiner  
Art Unit: 1625

/Taylor Victor Oh/

Primary Examiner, Art Unit 1625

12/03/08